



• **Board of Directors**
Engineering and Operations Committee

10/12/2021 Board Meeting

7-3

Subject

Authorize an agreement with Helix Environmental Planning, Inc., in an amount not to exceed \$2.8 million, to prepare environmental documentation for the Regional Recycled Water Program and an agreement with Stantec Consulting Services Inc., in an amount not to exceed \$6.5 million for engineering and technical studies to support the environmental planning phase of the Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The challenges and risks associated with recurring drought conditions, ongoing climate change, and underlying seismic risks to the region have underscored the need to develop additional local water supplies. In response to these challenges, Metropolitan initiated the environmental planning phase of the Regional Recycled Water Program (Program) in November 2020. The objective of the Program is to develop a new local resource that will increase future water supply reliability for the Southern California region. In order to complete the environmental planning phase as currently envisioned, staff recommends the award of two professional services agreements. This action authorizes a consulting agreement to provide specialized expertise for the preparation of environmental documentation for the full Program. This action also authorizes a second consulting agreement to provide specialized engineering and technical studies related to the Program's advanced water treatment (AWT) facilities in support of the environmental planning efforts.

Details

Background

In November 2015, Metropolitan's Board authorized an agreement with the Los Angeles County Sanitation District No. 2 (Sanitation District) to establish a partnership between Metropolitan and the Sanitation District in developing a new local resource that would help address the effects of the unprecedented drought conditions experienced in California. The Program's goal is to produce purified water for reuse applications such as groundwater recharge, industrial uses, and future direct potable use (DPR) through raw water augmentation at Metropolitan's water treatment plants. The Sanitation District provides wastewater and solid waste management for approximately 5.3 million people in Los Angeles County. The largest treatment plant in the system, the Joint Water Pollution Control Plant (Joint Plant), located in Carson, California, has a capacity of 400 million gallons of water per day (mgd) and an average daily flow of approximately 260 mg.

Treated secondary effluent from the Joint Plant is currently discharged through outfall tunnels to the Pacific Ocean in accordance with ocean discharge regulations. The Program would instead capture that water and treat it for beneficial reuse, adding a significant new water supply to Metropolitan's service area. The Program is currently envisioned to initially produce approximately 150 mgd of purified water for reuse under a two-phase approach. The ultimate capacity of the Program would be determined by the availability of source water from the Joint Plant, the anticipated demands by the member agencies for groundwater replenishment, industrial uses, and potential DPR applications, and the pending development and approval of DPR regulations by the state.

In November 2020, Metropolitan's Board authorized an amendment to the existing agreement with the Sanitation District to support further development and evaluation of the Program and preparation of environmental documentation, technical studies, and public outreach for the Program. Agreements were authorized in June 2021 and August 2021 for engineering and technical services related to the Program's conveyance and AWT demonstration facilities, respectively. Agreements for preparation of environmental documentation for the full Program and engineering and technical studies related to the Program's AWT facilities are needed at this time.

In accordance with the April 2020 action on the biennial budget for fiscal years 2020/21 and 2021/22 and the November 2020 action to initiate the environmental planning phase of the Program, the General Manager authorized staff to proceed with planning phase activities for the Program using Metropolitan's O&M funds budgeted for this purpose. The two agreements that are the subject of this board action, and the consulting agreement that was authorized by the Board in June 2021, will be utilized to complete the technical studies and environmental planning efforts for the Program. The total estimated cost to complete these engineering and technical studies, outreach, and environmental documentation is \$30 million. Funds for these planning activities for the Program are included in the O&M budget for fiscal years 2020/21 and 2021/22.

Similar to the current demonstration testing of membrane bioreactor for potable reuse, the effectiveness of the proposed treatment train for DPR must be demonstrated and approved by the regulators before its full-scale implementation. Modifications to the existing AWT Demonstration Facility at the Joint Plant to include additional DPR treatment options, such as ozonation and biological activated carbon, are planned to start in 2022 to accommodate testing of potential processes and facilitate collection of required information for regulatory acceptance.

In accordance with the April 2020 action on the biennial budget for fiscal years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with the design of facility modifications to the existing AWT Demonstration Facility for DPR demonstration testing purpose, pending board award of the Engineering Services contract below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2020/21 and 2021/22 (Appropriation No. 15517). This project is identified in the CIP Appendix for Fiscal Years 2020/21 and 2021/22 as a part of the Regional Recycled Water Program. Funds required for work to be performed pursuant to the subject contract after Fiscal Year 2021/22 will be budgeted within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24.

Environmental Planning Support for the Regional Recycled Water Program

Environmental planning activities for the full-scale Program include technical studies and analyses for the preparation of a Program Environmental Impact Report (PEIR) in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. The PEIR will allow Metropolitan to consider broad policy alternatives and program-wide mitigation measures early in the Program's development and will provide greater flexibility to consider alternatives to avoid, minimize, and develop mitigation measures for identified impacts. Supplemental documents to address project-specific elements that are not addressed in the PEIR would be prepared in a later phase and are not included in this board action.

In addition to the PEIR, to take advantage of potential low-interest loans and grants from the State Revolving Funds (SRF) and other federal funding sources, a "CEQA-Plus" analysis will be prepared to comply with federal cross-cutting requirements for SRF and federal funds. Presently, it is not anticipated that additional National Environmental Policy Act (NEPA) compliance will be required to complete PEIR development and certification for the Program during this phase of work. If any impact on resources within federal jurisdiction is identified, the impacted federal agency will assess the environmental effects of the proposed action and any reasonable alternatives before deciding on whether and/or how to proceed with NEPA compliance. Metropolitan's consultant for environmental support services, identified below, would assist Metropolitan in providing NEPA support to the appropriate federal agency.

Engineering and Technical Studies for the AWT Facilities

Specialized engineering and technical studies are required to identify and evaluate potential Program alternatives and develop key design criteria under State CEQA Guidelines. Two agreements have been previously authorized for studies related to the conveyance and AWT demonstration facilities. The Sanitation District is currently

evaluating options to remove nitrogen from the Joint Plant's primary or secondary effluent, which would significantly reduce the downstream treatment requirements at an AWT facility and provide potential cost savings for the Program. Recommendations from these technical analyses will be considered during the Program's environmental planning phase, along with the results of demonstration testing.

Additional studies and investigations are needed to further develop the recommended AWT process; prepare a full-scale conceptual plan of the AWT facilities; explore potential DPR facility sites and treatment technologies for raw water augmentation at Metropolitan's water treatment plants; and evaluate power and energy sustainability to address regulatory, operational, and construction impacts. Information collected from the studies will also be utilized to support the preparation of environmental documentation, as described below.

Environmental Planning Support (Helix Environmental Planning, Inc.) – New Agreement

Helix Environmental Planning, Inc. (Helix) is recommended to prepare environmental documentation in compliance with CEQA, "CEQA-Plus," and potentially NEPA, as described above. Helix was selected through a competitive process via Request for Proposals No. 1285 based on the firm's specific experience in analyzing and addressing impacts and in preparing environmental documents of a similar scope for large-scale and complex projects within California on behalf of public agencies.

The specialized environmental planning services include: (1) development of a comprehensive project description in coordination with Metropolitan and the Sanitation District; (2) assessment of a reasonable range of potential alternatives in accordance with State CEQA Guidelines; (3) assessment of potential environmental impacts of the Program's construction and operation; (4) development of feasible mitigation measures to reduce or avoid significant environmental impacts; (5) management and distribution of all notices and documents in compliance with State CEQA Guidelines; (6) preparation of a "CEQA-Plus" analysis in accordance with federal cross-cutting requirements for SRF and federal funds; (7) technical support for public hearings, scoping meetings, and regulatory permit evaluation; and (8) preparation of a PEIR in compliance with State CEQA Guidelines.

This action authorizes a new agreement with Helix Environmental Planning, Inc., for a not-to-exceed amount of \$2.8 million, for environmental review and analysis and preparation of environmental documentation for the Program. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Helix has agreed to meet this level of participation. The planned subconsultants for this work are listed in **Attachment 1**.

Engineering Services for AWT Facilities (Stantec Consulting Services Inc.) – New Agreement

Stantec Consulting Services Inc. (Stantec) is recommended to conduct the engineering and technical studies for the AWT facilities described above. Stantec was selected through a competitive process via Request for Proposals No. 1283 based on the firm's experience in design, construction, and operation of conventional wastewater treatment and advance treatment processes associated with water/wastewater treatment facilities, including permitting and DPR applications.

The planned engineering and technical studies include: (1) comprehensive site investigation and geotechnical analyses; (2) assessment of AWT and DPR technologies; (3) development of design criteria, treatment process and operating criteria, and conceptual plan for a full-scale AWT facility at the Joint Plant; (4) design of a demonstration scale DPR testing facility; (5) development of construction cost estimates and project schedule; and (6) preparation of technical reports documenting all findings and recommendations.

This action authorizes a new agreement with Stantec Consulting Services Inc., for a not-to-exceed amount of \$6.5 million, for engineering and technical studies related to the AWT facilities to support the environmental planning phase of the Program. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Stantec has agreed to meet this level of participation. The planned subconsultants for this work are listed in **Attachment 2**.

Alternatives Considered

Staff considered several alternatives to complete the necessary engineering and technical studies and environmental documentation for the environmental planning phase of the Program. One alternative was to utilize Metropolitan's staff to perform all work components. The Program's upcoming activities will include the need for specialized engineering expertise such as technical knowledge and experience in implementing AWT

technologies and DPR applications. The in-house engineering staff does not routinely work in these areas. The recommended approach uses in-house staff for items normally encountered when working on Capital Investment Plan (CIP) projects, while consultants are utilized for specialized technical studies. This strategy will also be used for the development of the environmental documentation, which requires sophisticated environmental analyses used in the implementation of complex, large-scale projects, consideration of various environmental factors, and preparation of specialized documents.

After assessing the current staff workload and the required expertise, the use of specialized consultants is recommended to perform specific work identified in this board letter. Under this approach, Metropolitan staff will oversee the consultants' work and maintain key engineering and environmental planning competencies, while addressing specialized project needs. This approach will allow for timely completion of engineering and technical studies and environmental documentation for the Program without impacting the planned schedules of key CIP rehabilitation projects in the most cost- and time-efficient manner possible.

Summary

This action authorizes new agreements with: (1) Helix Environmental Planning, Inc., for a not-to-exceed amount of \$2.8 million to prepare the environmental documentation for the environmental planning phase of the Program; and (2) Stantec Consulting Services Inc., for a not-to-exceed amount of \$6.5 million for engineering and technical studies to support the environmental planning phase of the Program. See **Attachment 1** for the Listing of Subconsultants for the Agreement with Helix Environmental Planning, Inc., **Attachment 2** for the Listing of Subconsultants for the Agreement with Stantec Consulting Services Inc.; and **Attachment 3** for the Location Map.

Project Milestones

March 2024 – Board certification of environmental documentation

April 2024 – Completion of demonstration facility modifications for DPR testing

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Board Report No. 01122016 IRP 8-3 B-L, “2015 Integrated Water Resources Plan Update,” adopted January 2016

By Minute Item 42287, dated February 11, 1997, the Board adopted a set of policy principles on water recycling.

By Minute Item 50299, dated November 10, 2015, the Board authorized an agreement with County Sanitation District No. 2 of Los Angeles County for development of a potential regional recycled water supply program and a demonstration project.

By Minute Item 50410, dated March 8, 2016, the Board authorized agreements for design of the demonstration scale recycled water treatment plant and feasibility studies of recycled water delivery system.

By Minute Item 50884, dated July 11, 2017, the Board authorized construction of the advanced water treatment demonstration plant.

By Minute Item 51963, dated April 14, 2020, the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

By Minute Item 52174, dated November 10, 2020, the Board authorized preparation of environmental documentation and technical studies, and public outreach activities for the Regional Recycled Water Program.

By Minute Item 52404, dated June 8, 2021, the Board authorized an agreement with Black & Veatch Corporation, Inc. for engineering and technical studies to support environmental planning phase activities of the Regional Recycled Water Program.

By Minute Item 52476, dated August 17, 2021, the Board authorized an agreement with CDM Smith for engineering and technical studies at the Advanced Water Treatment Demonstration Facility.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from the provisions of CEQA and the State CEQA Guidelines because it consists of minor public or private alterations in the condition of land, water, and/or vegetation, which do not involve removal of healthy, mature, scenic trees (Section 15304 of the State CEQA Guidelines). Additionally, the proposed action is exempt from the provisions of CEQA and the State CEQA Guidelines because it consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded (Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Authorize an agreement with Helix Environmental Planning, Inc., in an amount not to exceed \$2.8 million for preparation of environmental documentation for the Regional Recycled Water Program; and
- b. Authorize an agreement with Stantec Consulting Services Inc., in an amount not to exceed \$6.5 million for engineering and technical studies to support environmental planning phase activities of the Regional Recycled Water Program.

Fiscal Impact: \$7.5 million in O&M funds and \$1.8 million in capital funds. Approximately \$3 million will be incurred in O&M funds and \$0.5 million in capital funds in the current biennium and have been previously authorized.

Business Analysis: This option would advance the development of significant water reuse in Southern California and would augment regional supplies for Metropolitan's entire service area to deal with droughts, climate change, seismic risks, and uncertainties of imported water supplies.

Option #2

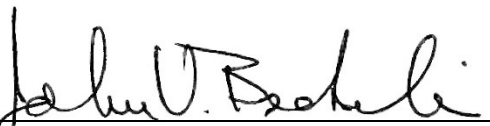
Do not proceed with the new agreements at this time.

Fiscal Impact: None

Business Analysis: This option would delay development of recycled water resources to meet the increasing need for the region's water supply to deal with drought, climate change, seismic risks, and other emergencies.

Staff Recommendation

Option #1



John V. Bednarski
Manager/Chief Engineer
Engineering Services
9/22/2021
Date

Adel Hagekhalil
General Manager
9/29/2021
Date**Attachment 1 – Subconsultants for Agreement with Helix Environmental Planning, Inc.****Attachment 2 – Subconsultants for Agreement with Stantec Consulting Services Inc.****Attachment 3 – Location Map**

Ref# es12677926

The Metropolitan Water District of Southern California
Subconsultants for Agreement with Helix Environmental Planning, Inc.

Subconsultant and Location
Paleo Solutions, Inc., Monrovia, CA
Ninyo & Moore Geotechnical and Environmental Sciences Consultants, San Diego, CA
Rick Engineering Company, San Diego, CA
Iteris, Inc., Los Angeles, CA

The Metropolitan Water District of Southern California
Subconsultants for Agreement with Stantec Consulting Services Inc.

Subconsultant and Location
Aldea Services, Inc., Los Angeles, CA
Carollo Engineers, Inc., Los Angeles, CA
Jacobs Engineering Group Inc., Los Angeles, CA
Kana Subsurface Engineering, Riverside, CA
One Water Solutions, Ann Arbor, MI
MWA Architects, Inc., San Francisco, CA
Paul Hansen Engineering, Rancho Palos Verdes, CA
Paul Redvers Brown, Inc., Encinitas, CA
THE CONVERSE PROFESSIONAL GROUP, dba Converse Consultants, Monrovia, CA
Trussell Technologies, Inc., Pasadena, CA
Veneklasen Associates, Inc., Santa Monica, CA

Location Map

